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| 09/599,812 | 06/21/2000 | Michael C. Murray | MSI-586US | 7148 |

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Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/599,812 | MURRAY ET AL. |
| | Examiner | Art Unit |
| | Qamrun Nahar | 2124 |

-- Th *MAILING DATE of this communication appears on th cov r sh et with the correspondence address* --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on _12 November 2003_.

2a)☐ This action is **FINAL**.          2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) _1-42_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-42_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application)
since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.
37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific
reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

| | |
|---|---|
| 1) ☐ Notice of References Cited (PTO-892) | 4) ☒ Interview Summary (PTO-413) Paper No(s). _13_. |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _12_. | 6) ☐ Other: |

## DETAILED ACTION

1.      This action is in response to the RCE filed on 11/12/03.

2.      The rejection under 35 U.S.C. 102(b) as being anticipated by Smale (U.S. 5,764,985) to claims 1, 8, 18, 25, 40, and 42 is withdrawn in view of applicant's arguments.

3.      The rejection under 35 U.S.C. 103(a) as being unpatentable over Smale (U.S. 5,764,985) in view of Cheng (U.S. 6,421,656) to claims 2-7, 19-24 and 41 is withdrawn in view of applicant's arguments.

4.      Claims 9, 18, 33 and 36 have been amended.

5.      Claims 1-42 are pending.

6.      Claims 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Smale (U.S. 5,764,985).

7.      Claims 1, 8, 18, 25, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smale (U.S. 5,764,985) in view of Donohue (U.S. 6,199,204).

8.      Claims 10, 12-17 and 26-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smale (U.S. 5,764,985) in view of Cheng (U.S. 6,421,656).

9.      Claims 2-7, 19-24 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smale (U.S. 5,764,985) in view of Donohue (U.S. 6,199,204), and further in view of Cheng (U.S. 6,421,656).

### *Response to Amendment*

### *Claim Rejections - 35 USC § 102*

10.     The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11.     Claims 9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Smale (U.S.

5,764,985).

## Per Claim 9 (Amended):

The Smale patent discloses:

**- a software architecture embodied on a computer-readable medium, the architecture**

**comprising: a hub structure configured to receive multiple different files that describe**

**software extensions that can be added to a software platform** ("a method and system that

coordinates software extensions ... One or more extensions register with the central manager, the

extensions being capable of providing extended functionality to one or more lower level

functions ... As calls are made from an application program to a lower level function, the calls

are intercepted at the central manager. Each of the appropriately registered extensions is then

notified of the existence of the call, thereby allowing the extensions to provide extended

functionality thereto ... the call is passed by the manager to the low level function, which returns

a result of the call to the manager. The extensions are then notified of the result of the call. This

enables the registered extensions to modify the result of the call, for example to retry the call. ...

The master list 50 comprises, for example, multiple data structures 52-54 which contain

information about the registered extensions indexed by the operation type (NotifyType) passed

thereto, such as NotifyAddConnection or NotifyCancelConnection." in abstract; column 2, lines

39-42; column 3, lines 1-15; Fig. 3; column 7, lines 16-35; and Fig. 5; the master list 50 is

interpreted as a hub structure; as the extensions are registered, the master list 50 receives requests

to add the connections for the extensions; it is inherent that the extensions are contained in a file)


**- combine the multiple different files into a single exposable list; and expose the single**

**exposable list to a filter structure comprising one or more attachment points configured to**

**filter the list** ("the data structure 52 contains information relating to all extensions of the type

registered for notification when requests to add connections are received ... a field 58 contains a

pointer identifying the location of an array 60 (or a list or table) wherein the addresses of the

extensions registered for this type of request are located.  As shown in FIGS. 4 and 5, other types

of registered extensions have similar data structures 53, 54, within the master entry list 50.  As

with data structure 52, each structure 53, 54 is indexed by its type, contains a counter for the

registered extension entries for that type, and includes a field containing a pointer to its

corresponding address array, 61, 62, respectively." in column 3, lines 38-40; column 7, lines 24-

43; and Figs. 4 and 5; the master list 50 adds connections for the multiple different files into a

single exposable list, and exposes the single exposable list to the multiple data structures 52-54

that is configured to filter the list; that is, multiple data structures 52-54 are interpreted as a filter

structure comprising one or more attachment points).

**Per Claim 11:**

The Smale patent discloses:

**- a computer embodying the software architecture of claim 9** (column 3, lines 20-23 and Fig.

1).

*Claim Rejections - 35 USC § 103*

12.     The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

13.     Claims 1, 8, 18, 25, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Smale (U.S. 5,764,985) in view of Donohue (U.S. 6,199,204).

**Per Claim 1:**

Smale teaches a software architecture embodied on a computer-readable medium, the

architecture comprising: multiple attachment points collectively arranged to filter data associated

with files that describe software extensions ("a method and system that coordinates software

extensions ... One or more extensions register with the central manager, the extensions being

capable of providing extended functionality to one or more lower level functions ... As calls are

made from an application program to a lower level function" in abstract; column 2, lines 39-42;

column 3, lines 1-10; column 7, lines 23-35; and Fig. 5; for example, Fig. 5, items 52, 53 and 54

illustrates the multiple attachment points collectively arranged to filter data associated with files

that describe software extensions; that is, multiple data structures 52-54 are interpreted as

multiple attachment points), one extension manager associated with the multiple attachment

points and with respective feature types that can be added to a software platform by software

extensions, the extension manager being configured to receive data from the multiple attachment

points ("One or more extensions register with the central manager, the extensions being capable

of providing extended functionality to one or more lower level functions ... As calls are made

from an application program to a lower level function, the calls are intercepted at the central

manager. Each of the appropriately registered extensions is then notified of the existence of the

call, thereby allowing the extensions to provide extended functionality thereto ... the call is

passed by the manager to the low level function, which returns a result of the call to the manager.

The extensions are then notified of the result of the call. This enables the registered extensions

to modify the result of the call, for example to retry the call. ... As a result, the notification

manager 32 has access to registered entries for all valid operation types that can be extended.

The master list 50 comprises, for example, multiple data structures 52-54 which contain

information about the registered extensions indexed by the operation type (NotifyType) passed

thereto, such as NotifyAddConnection or NotifyCancelConnection. By way of example, as best

shown in Fig. 5 the data structure 52 contains information relating to all extensions of the type

registered for notification when requests to add connections are received, as identified by the

type information stored in a first field 56 therein." in abstract; column 3, lines 1-15; and column

7, lines 16-27; notification manager 32 is interpreted as the extension manager, which is

associated with the multiple attachment points and with respective feature types). Smale does

not explicitly teach multiple extension managers, where the extension managers being

configured to receive data from the multiple attachment points that pertains only to the feature

type with which the extension manager is associated.

Donohue teaches multiple extension managers, where the extension managers being

configured to receive data from the multiple attachment points that pertains only to the feature

type with which the extension manager is associated ("Updater components are preferably an

integral part of the products they will serve to update." in column 5, lines 1-16 and column 6,

lines 1-32; updater components are interpreted as multiple extension managers, where each is

associated with a computer program).

It would have been obvious to one having ordinary skill in the computer art at the time of

the invention was made to modify the software architecture disclosed by Smale to include

multiple extension managers, where the extension managers being configured to receive data

from the multiple attachment points that pertains only to the feature type with which the

extension manager is associated using the teaching of Donohue. The modification would be

obvious because one of ordinary skill in the art would be motivated to add extensions more

efficiently by having an extension manager for each feature type (Donohue, column 3, lines 8-14

and column 5, lines 24-32).

**Per Claim 8:**

The rejection of claim 1 is incorporated, and Smale further teaches a computer

embodying the software architecture of claim 1 (column 3, lines 20-23 and Fig. 1).

**Per Claim 18 (Amended):**

This is another version of the claimed software architecture discussed above, (claims 1

and 9), wherein all claim limitations also have been addressed and/or covered in cited areas as

set forth above. Thus, accordingly, this claim is also obvious.

**Per Claim 25:**

The rejection of claim 18 is incorporated, and Smale further teaches a computer

embodying the software architecture of claim 18 (column 3, lines 20-23 and Fig. 1).

**Per Claim 40:**

This is a method version of the claimed software architecture discussed above, claim 18,

wherein all claim limitations also have been addressed and/or covered in cited areas as set forth

above, including "receives multiple different files, each of which being associated with a

different software extension and logically describing its associated software extension" (Smale,

column 7, lines 16-27) and "processing exposed portions of the list to identify one or more

feature types that are to be added to a software platform" (Smale, column 7, lines 16-27). Thus,

accordingly, this claim is also obvious.

**Per Claim 42:**

The rejection of claim 40 is incorporated, and Smale further teaches one or more

computer-readable media having computer-readable instructions thereon which, when executed

by a computer, cause the computer to implement the method of claim 40 (column 3, lines 20-23
and Fig. 1).

14.     Claims 10, 12-17 and 26-39 are rejected under 35 U.S.C. 103(a) as being unpatentable
over Smale (U.S. 5,764,985) in view of Cheng (U.S. 6,421,656).

**Per Claim 10:**

The rejection of claim 9 is incorporated, and Smale further teaches that the hub structure
receives multiple different files and exposes a list (column 3, lines 1-15 and lines 38-40; column
7, lines 24-43; and Figs. 3, 4, and 5).  Smale does not explicitly teach XML files or exposing a
list of XML nodes.  Cheng teaches XML files and exposing a list of XML nodes (column 15,
lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of
the invention was made to modify the software architecture disclosed by Smale to include XML
files and expose a list of XML nodes using the teaching of Cheng.  The modification would be
obvious because one of ordinary skill in the art would be motivated to provide extensions using
an extensible programming language and to provide extensions to World Wide Web documents.

**Per Claim 12:**

Smale teaches a software architecture embodied on a computer-readable medium, the
architecture comprising multiple different attachment points each of which is configured to
receive data that pertains to one or more software extensions that can be added to a software

platform ("a method and system that coordinates software extensions ... One or more extensions register with the central manager, the extensions being capable of providing extended functionality to one or more lower level functions ... As calls are made from an application program to a lower level function, the calls are intercepted at the central manager. Each of the appropriately registered extensions is then notified of the existence of the call, thereby allowing the extensions to provide extended functionality thereto ... the call is passed by the manager to the low level function, which returns a result of the call to the manager. The extensions are then notified of the result of the call. This enables the registered extensions to modify the result of the call, for example to retry the call." in abstract; column 2, lines 39-42; column 3, lines 1-15; and Fig. 3), process the data to provide a list, and expose the list ("the data structure 52 contains information relating to all extensions of the type registered for notification when requests to add connections are received ... a field 58 contains a pointer identifying the location of an array 60 (or a list or table) wherein the addresses of the extensions registered for this type of request are located. As shown in FIGS. 4 and 5, other types of registered extensions have similar data structures 53, 54, within the master entry list 50. As with data structure 52, each structure 53, 54 is indexed by its type, contains a counter for the registered extension entries for that type, and includes a field containing a pointer to its corresponding address array, 61, 62, respectively." in column 3, lines 38-40; column 7, lines 24-43; and Figs. 4 and 5). Smale does not explicitly teach XML data, providing a list of XML nodes, or exposing the list of XML nodes. Cheng teaches XML data, providing a list of XML nodes, and exposing the list of XML nodes ("The XML document presented above has its document structure tree illustrated in Fig. 8 ... the nodes have been shown in Fig. 8." in column 15, lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of

the invention was made to modify the software architecture disclosed by Smale to include XML

data, provide a list of XML nodes, and expose the list of XML nodes using the teaching of

Cheng. The modification would be obvious because one of ordinary skill in the art would be

motivated to provide extensions using an extensible programming language and to provide

extensions to World Wide Web documents.


**Per Claims 13-16:**

These are another versions of the claimed software architecture discussed above (claims 9

and 10), wherein all claim limitations also have been addressed and/or covered in cited areas as

set forth above. Thus, accordingly, these claims are also obvious.


**Per Claim 17:**

The rejection of claim 12 is incorporated, and Smale further teaches a computer

embodying the software architecture of claim 12 (column 3, lines 20-23 and Fig. 1).


**Per Claim 26:**

This is a method version of the claimed software architecture discussed above, claim 12,

wherein all claim limitations also have been addressed and/or covered in cited areas as set forth

above. Furthermore, the combination of Smale and Cheng teaches notifying an extension

manager that is associated with at least one feature type if a node that corresponds to that feature

type is identified in the XML list (Smale, column 7, lines 23-27 and Cheng, column 15, lines 31-

56; Cheng is relied upon for the claimed limitation reciting "the XML list"). It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the method disclosed by Smale to include XML list using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language and to provide extensions to World Wide Web documents.

Thus, accordingly, this claim is also obvious.

**Per Claim 27:**

The rejection of claim 26 is incorporated, and Cheng further teaches that the multiple attachment points are defined as predicate chains (column 3, lines 48-51).

**Per Claim 28:**

The rejection of claim 27 is incorporated, and Cheng further teaches that the individual attachment points receive XML data as an input and expose a list of XML nodes (column 15, lines 31-56).

**Per Claim 29:**

The rejection of claim 26 is incorporated, and Cheng further teaches that the processing is accomplished by filtering on specific nodes (column 15, lines 31-56).

**Per Claim 30:**

The rejection of claim 26 is incorporated, and Cheng further teaches that the processing is accomplished by exposing various nodes (column 15, lines 31-56).

**Per Claim 31:**

The rejection of claim 26 is incorporated, and Cheng further teaches that the processing is accomplished by filtering on specific nodes and exposing various nodes (column 15, lines 31-56).

**Per Claim 32:**

The rejection of claim 26 is incorporated, and Smale further teaches one or more computer-readable media having computer-readable instructions thereon which, when executed by a computer, cause the computer to implement the method of claim 26 (column 3, lines 20-23 and Fig. 1).

**Per Claims 33 (Amended) & 34-35:**

These are method versions of the claimed software architecture discussed above, claim 12, wherein all claim limitations also have been addressed and/or covered in cited areas as set forth above, including "receiving XML data that pertains to a software extension that is to be added to a software platform" and "processing the XML data using one or more attachment points to identify XML nodes" (Smale, column 7, lines 16-27 and Cheng, column 15, lines 31-56; Cheng is relied upon for the claimed limitation reciting "XML data" and "XML nodes"). Thus, accordingly, these claims are also obvious.

**Per Claim 36 (Amended):**

The rejection of claim 33 is incorporated, and Cheng further teaches wherein the XML

list is exposed to one or more attachment points that are defined as predicate chains that filter the

XML data (column 3, lines 48-51).

**Per Claim 37:**

The rejection of claim 36 is incorporated, and Cheng further teaches wherein at least one

of the attachment points exposes a node (column 15, lines 31-56).

**Per Claim 38:**

The rejection of claim 36 is incorporated, and Cheng further teaches wherein at least one

of the attachment points filters on a node (column 15, lines 31-56).

**Per Claim 39:**

The rejection of claim 33 is incorporated, and Smale further teaches one or more

computer-readable media having computer-readable instructions thereon which, when executed

by a computer, cause the computer to implement the method of claim 33 (column 3, lines 20-23

and Fig. 1).

15.     Claims 2-7, 19-24 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Smale (U.S. 5,764,985) in view of Donohue (U.S. 6,199,204), and further in view of Cheng

(U.S. 6,421,656).

**Per Claim 2:**

The rejection of claim 1 is incorporated, and further, the combination Smale and

Donohue does not explicitly teach that the attachment points are defined as predicate chains.

Cheng teaches that the attachment points are defined as predicate chains (column 3, lines 48-51).

It would have been obvious to one having ordinary skill in the computer art at the time of

the invention was made to modify the software architecture disclosed by the combination Smale

and Donohue to include that the attachment points are defined as predicate chains using the

teaching of Cheng.  The modification would be obvious because one of ordinary skill in the art

would be motivated to provide proper order of execution of the extended functionality.

**Per Claim 3:**

The rejection of claim 1 is incorporated, and further, the combination Smale and

Donohue does not explicitly teach that the attachment points filter XML data.  Cheng teaches

that the attachment points filter XML data (column 3, lines 48-51).

It would have been obvious to one having ordinary skill in the computer art at the time of

the invention was made to modify the software architecture disclosed by the combination Smale

and Donohue to include that the attachment points filter XML data using the teaching of Cheng.

The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions using an extensible programming language.

## Per Claim 4:

The rejection of claim 3 is incorporated, and Cheng further teaches that each feature type is associated with an XML tag (column 15, lines 31-51).

## Per Claim 5:

The rejection of claim 3 is incorporated, and Cheng further teaches that each feature type is associated with an XML tag, at least some of the feature types comprising user-defined feature types (column 2, lines 2-5 and column 15, lines 31-51).

## Per Claim 6:

The rejection of claim 1 is incorporated, and further, the combination Smale and Donohue does not explicitly teach that each attachment point exposes collections of ordered nodes. Cheng teaches that each attachment point exposes collections of ordered nodes (column 15, lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of the invention was made to modify the software architecture disclosed by the combination Smale and Donohue to include that each attachment point exposes collections of ordered nodes using the teaching of Cheng. The modification would be obvious because one of ordinary skill in the art would be motivated to provide extensions to World Wide Web documents.

**Per Claim 7:**

The rejection of claim 1 is incorporated, and further, the combination Smale and

Donohue does not explicitly teach that each attachment point exposes collections of ordered

XML nodes. Cheng teaches that each attachment point exposes collections of ordered XML

nodes (column 15, lines 31-56).

It would have been obvious to one having ordinary skill in the computer art at the time of

the invention was made to modify the software architecture disclosed by the combination Smale

and Donohue to include that each attachment point exposes collections of ordered XML nodes

using the teaching of Cheng. The modification would be obvious because one of ordinary skill

in the art would be motivated to provide extensions to World Wide Web documents.

**Per Claim 19:**

The rejection of claim 18 is incorporated, and the combination of Smale and Donohue

further teaches that the hub structure receives multiple different files and exposes a list (Smale,

column 3, lines 1-15 and lines 38-40; column 7, lines 24-43; and Figs. 3, 4, and 5). The

combination of Smale and Donohue does not explicitly teach XML files or exposing a list of

XML nodes. Cheng teaches XML files and exposing a list of XML nodes (column 15, lines 31-

56).

It would have been obvious to one having ordinary skill in the computer art at the time of

the invention was made to modify the software architecture disclosed by the combination of

Smale and Donohue to include XML files and expose a list of XML nodes using the teaching of

Cheng. The modification would be obvious because one of ordinary skill in the art would be

motivated to provide extensions using an extensible programming language and to provide

extensions to World Wide Web documents.


**Per Claim 20:**

The rejection of claim 19 is incorporated, and Cheng further teaches that the list contains

root node tags for all of the XML files (column 15, lines 31-56).


**Per Claim 21:**

The rejection of claim 19 is incorporated, and the combination of Smale, Donohue, and

Cheng further teaches that the XML files logically describe where a particular extension fits on

the software platform (Smale, column 3, lines 38-40, column 7, lines 24-43, and Figs. 4 and 5;

and Cheng, column 15, lines 31-56).


**Per Claim 22:**

The rejection of claim 19 is incorporated, and Cheng further teaches that the attachment

points are defined as predicate chains (column 3, lines 48-51).


**Per Claim 23:**

The rejection of claim 19 is incorporated, and Smale further teaches an extension

manager is notified whenever an extension comprising a feature type with which it is associated

is added or removed from the software platform (column 3, lines 1-15).

**Per Claim 24:**

The rejection of claim 19 is incorporated, and Cheng further teaches that each feature

type is associated with a particular XML tag (column 15, lines 31-51).

**Per Claim 41:**

This is a method version of the claimed software architecture discussed above, claim 19,

wherein all claim limitations also have been addressed and/or covered in cited areas as set forth

above. Thus, accordingly, this claim is also obvious.

## *Response to Arguments*

16.      Applicant's arguments, see pg. 14, line 23 to pg. 16, line 3, filed 11/12/03, with respect to

the rejection(s) of claim(s) 1, 8, 18, 25, 40, and 42 under 35 U.S.C. 102(b) as being anticipated

by Smale (U.S. 5,764,985) and the rejection(s) of claims(s) 2-7, 19-24 and 41 under 35 U.S.C.

103(a) as being unpatentable over Smale (U.S. 5,764,985) in view of Cheng (U.S. 6,421,656)

have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of

Smale (U.S. 5,764,985) teaching only one extension manager. Donohue (U.S. 6,199,204)

teaches multiple extension managers, which was previously cited in the Notice of References

Cited (See Paper. no. 5). Therefore,

Claims 1, 8, 18, 25, 40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Smale (U.S. 5,764,985) in view of Donohue (U.S. 6,199,204).

Claims 2-7, 19-24 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Smale (U.S. 5,764,985) in view of Donohue (U.S. 6,199,204), and further in view of Cheng

(U.S. 6,421,656).

*In the remarks, the applicant argues that:*

a)          **Claims Rejected Under - 35 USC §102 b)**

Independent claims 1, 9, 18, and 40 stand rejected under 35 USC § 102 as being

anticipated by

Smale (USPN 5,764,985, hereinafter "the Smale patent").  ...


In addressing the "multiple; attachment point" element of claim 1, the Office refers

to the arrays 60-62 shown in Fig. 5 of the Smale patent. In particular, it is stated in the first

paragraph of page 3 of the prior Office action that "Fig. 5, items 60, 61 and 62 illustrates the

multiple attachment points collectively arranged to filter data associated with files that describe

software extensions: that is, arrays 60-62 are interpreted as multiple attachment points."

Applicant respectfully disagrees with the equating by the Office of the arrays 60-62 of

the Smale patent with the multiple attachment points of claim 1. As described on page 43, lines

7-12 of the present invention:

An attachment point is simply a collection of objects that fire

events to registered listeners as objects are added to or removed from

the collection. Many types of attachment points can be created, but

all take data from a source (often another attachment point), process

it (either dynamically or statically), and expose the results of their

processing.

Claim 1 recites "multiple attachment points collectively arranged to filter data associated with files that describe software extensions." That is, in accordance with claim 1, multiple attachment points (each of which take date from a source, filter the data and expose the results of the filtering) are arranged in a manner such that they collectively filter data associated with files that describe software extensions.

Unlike the multiple attachment points of claim 1, the arrays 60-62 of the Smale patent do not "process" data. As noted in column 7, lines 33-35 of the Smale patent, each of the arrays 60-62 comprises a list or table of addresses of registered extensions. That is, the arrays 60-62 of the Smale patent are simply data structures that store addresses. There is no discussion whatsoever in the Smale is patent of these arrays processing data. Furthermore, there is no mention in the Smale patent of the arrays being arranged to filter data, as recited in claim 1. Since the arrays 60-62 of the Smale patent neither process data, nor are they arranged to filter data, it is Applicant's position that the equating of the arrays 60-62 of the Smale patent with the multiple attachment point element of claim 1 is inappropriate and incorrect.

In addressing the "multiple extension managers" element of claim 1, the Office refers to the multiple data structures 52-54 shown in Fig. 5 of the Smale patent. In particular, it is stated in the first paragraph of page 4 of the prior Office action that "multiple data structures 52-54 are interpreted as multiple extension managers, which are associated with multiple attachment points and with respective feature types."

Applicant respectfully disagrees with the equating by the Office of the multiple data structures 52-54 of the Smale patent with the multiple extension managers of claim 1. In

particular, Applicant disagrees that the multiple data structures 52-54 of the Smale patent

"receive data from the multiple attachment points," as do the multiple extension managers recited

in claim 1. As shown in Fig. 5, and as noted in column 7, lines 16-35 of the Smale patent, each of

the multiple data structures 52-54 includes a first field 56 containing a request type, a second

field 57 containing a counter to track the number of extensions registered for the type of request

identified in the first field 56, and a third field containing a pointer to one of the arrays 60-62,

discussed above.

As noted previously, the arrays 60-62 of the Smale patent are not multiple "attachment

points," as that term is used and defined in the present application. Furthermore, even assuming

arguendo that the arrays 60-62 of the Smale reference were equated with attachment points, the

multiple data structures 52-54 do not receive data of any type or in any vvay from the arrays

60-62. Rather, each of the multiple data structures 52-54 simply holds a pointer to one of the

arrays 60-62.

Put simply, the multiple data structures 52-54 of the Smale patent do not receive data from

attachment points, even if one were to incorrectly equate the arrays 60-62 of the Smale reference

to the attachment points of the present application. As such, the multiple data structures 52-54 do

not "receive data from the multiple attachment points that pertains only to the feature type with

which the extension manager is associated," as recited in claim 1.

As described, the Smale patent fails to teach or suggest either multiple attachment points or

the multiple extension managers, as those elements are defined in claim 1. As such, it is

believed that claim 1 is allowable over the Smale patent, and such allowance is respectfully

requested.

**Claims 2-8** each depend in some form from claim 1. As such, each of to claims 2-8 is

necessarily allowable over the Smale patent by virtue of this dependency. Each of claims 2-11

also specifies additional features that are not disclosed by either the Smale patent, either alone or

in combination with the Cheng patent (USPN 6,421,656).

*Examiner's response:*

a)      The Examiner would like to point out that claim 1 is now rejected under the combination

of Smale and Donohue. Examiner strongly disagrees with applicant's assertion that the

combination of Smale and Donohue fails to disclose the claimed limitations recited in claim 1.

The combination of Smale and Donohue clearly shows each and every limitation in claim 1.

Smale teaches **multiple attachment points** collectively arranged to filter data associated with

files that describe software extensions (abstract; column 2, lines 39-42; column 3, lines 1-10;

column 7, lines 23-35; and Fig. 5; for example, Fig. 5, items 52, 53 and 54 illustrates the multiple

attachment points collectively arranged to filter data associated with files that describe software

extensions; that is, *multiple data structures 52-54* are interpreted as *multiple attachment points*);

Smale further teaches **one extension manager** associated with the multiple attachment points

and with respective feature types that can be added to a software platform by software

extensions, the extension manager being configured to receive data from the multiple attachment

points (abstract; column 3, lines 1-15; and column 7, lines 16-27; *notification manager 32* is

interpreted as the *extension manager*, which is associated with the multiple attachment points

and with respective feature types). Donohue teaches **multiple extension managers**, where the

extension managers being configured to receive data from the multiple attachment points that

pertains only to the feature type with which the extension manager is associated (column 5, lines

1-16 and column 6, lines 1-32; *updater components* are interpreted as *multiple extension*

*managers*, where each is associated with a computer program). In addition, see the rejection

above in paragraph 13 for rejection to claims 1 and 8, and see the rejection above in paragraph

15 for rejection to claims 2-7.

*In the remarks, the applicant argues that:*

b)  **Claim 18 reads** as follows: ...

Claim 18 has been amended to make clear that "the filter structure that is configured to

filter the

list" is the "filter structure comprising multiple attachment points."

In setting forth the rejection of claim 18, the Office states that "This is another version

of the claimed software architecture discussed above, claim 9, wherein all the limitations also

have been addressed and/or covered in cited areas as set forth above. Thus, accordingly, this

claim is also anticipated by Smale."

For at least the reasons discussed above with respect to claims 1 and 9, it is Applicant's

position that the Smale patent fails to teach or suggest the filter structure comprising multiple

attachment points recited in claim 18. As such, it is believed that claim 18 is allowable over the

Smale patent, and such allowance is respectfully requested.

**Claims 19-25** each depend in some form from claim 18. As such, each of claims 19-25

is necessarily allowable over the Smale patent by virtue of this dependency. Each of claims

19-25 also specifies additional features that are not disclosed by either the Smale patent, either

alone or in combination with the Cheng patent (USPN 6,421,656).

*Examiner's response:*

b)      The Examiner would like to point out that claim 18 is now rejected under the

combination of Smale and Donohue.  Examiner strongly disagrees with applicant's assertion that

the combination of Smale and Donohue fails to disclose the claimed limitations recited in claim

18.  The combination of Smale and Donohue clearly shows each and every limitation in claim

18.  The Examiner has already addressed the applicant's arguments, see paragraph 17, Examiner

Response (a).  In addition, see the rejection above in paragraph 13 for rejection to claims 18 and

25, and see the rejection above in paragraph 15 for rejection to claims 19-24.

*In the remarks, the applicant argues that:*

c)      **Claim 40** reads as follows: ...

In setting forth the rejection of claim 18, the Office states:

This method is a version of the claimed software architecture

discussed above, claim 18, wherein all claim limitations also have

been addressed and/or covered in cited areas as set forth above,

including "receives multiple different files. Each of which being

associated with a different software extension and logically

describing its associated software extension" (column 7, lines 16-

27). Thus, accordingly, this claim is also anticipated by Smale.

Applicant respectfully disagrees with the Office's contention that all of the claim

limitations of claim 40 have been addressed by the Office with respect to claim 18. Applicant

would like to point out that although there may be some overlap between the features of claim 18

and claim 40, the claims are not identical. The Applicant has submitted extra fees for the

inclusion and to examination of each claim in the application. In response to this effort, it is the

PTO's responsibility to fully examine each of these claims, and to give full consideration to each

of the limitations of these claims.

For example, and without limitation, the step of "processing exposed portions of the list to

identify one or more feature types that are to be added to a software platform," was not an

element of claim 18. As such, this step was not addressed with respect to claim 18. The Smale

patent does not discuss teach or suggest such a step.

Furthermore, the Smale patent does not teach or suggest "notifying an extension manager

that is associated with a particular feature type," as recited in claim 40. As discussed above with

respect to claim 1, the Office equates the multiple data structures 52-54 of the Smale patent with

the extension managers of the present invention. For the reasons set forth previously with respect

to claim 1, it is Applicant's position that the multiple data structures 52-54 of the Smale patent

are not equivalent to the multiple extension managers of the present invention is incorrect.

For these reasons, it is Applicant's position that the Smale patent fails to teach or suggest

each of the limitations of claim 40. As such, it is believed that claim 40 is allowable over the

Smale patent, and such allowance is respectfully requested.

**Claims 41-42** each depend in some form from claim 40. As such, each of claims 41-42 is necessarily allowable over the Smale patent by virtue of this dependency. Each of claims 41-42 also specifies additional features that are not disclosed by either the Smale patent, either alone or in combination with the Cheng patent (USPN 6,421,656).

*Examiner's response:*

c)      The Examiner would like to point out that claim 40 is now rejected under the combination of Smale and Donohue. Examiner strongly disagrees with applicant's assertion that the combination of Smale and Donohue fails to disclose the claimed limitations recited in claim 40. The combination of Smale and Donohue clearly shows each and every limitation in claim 40. The combination of Smale and Donohue further teaches "processing exposed portions of the list to identify one or more feature types that are to be added to a software platform" (Smale, column 7, lines 16-27). Furthermore, the Examiner has already addressed the applicant's arguments regarding claim 1 in the Examiner's Response (a) above.

In addition, see the rejection above in paragraph 13 for rejection to claims 40 and 42, and see the rejection above in paragraph 15 for rejection to claim 41.

17.      Applicant's arguments with respect to claims 9-17 and 26-39 have been fully considered but they are not persuasive.

*In the remarks, the applicant argues that:*

a)      **Claim 9** reads as follows: ...

In addressing the "filter structure" recited in claim 1, the Office refers to the notification manager 32 of the Smale patent. In particular, it is stated in the first paragraph of page 6 of the prior Office action that "the notification manager is interpreted as the filter structure." Claim 9 has been amended to indicate that the filter structure to which the exposable list is exposed comprises one or more attachment points. With respect to attachment points, it is stated in the first paragraph of page 3 of the prior Office action that "arrays 60-62 are interpreted as s multiple attachment points." As previously noted, on page 43, lines 7-12 of the to present invention it is stated that:

> An attachment point is simply a collection of objects that fire
>
> events to registered listeners as objects are added to or removed from
>
> the collection. Many types of attachment points can be created, but
>
> all take data from a source (often another attachment point), process
>
> it (either dynamically or statically), and expose the results of their
>
> processing.

Unlike the one or more attachment points of claim 9, the arrays 60-62 of the Smale patent do not "process" data. The arrays 60-62 of the Smale patent are simply data structures that store addresses. There is no discussion whatsoever in the Smale patent of these arrays processing data. Furthermore, there is no mention in the Smale patent of the arrays being configured to filter data, as recited in claim 9. For at least these reasons it is Applicant's position that claim 9 is distinguishable over the Smale patent.

As described, the Smale patent fails to teach or suggest "a hub structure configured to . . expose the single exposable list to a filter structure comprising one or more attachment points

configured to filter the list, as recited in claim 9. As such, it is believed that claim 9 is allowable over the Smale patent, and such allowance is respectfully requested.

**Claims 10 and 11** each depend in some form from claim 9. As such, each of claims 10 and 11 is necessarily allowable over the Smale patent by virtue of this dependency. Each of claims 10 and 11 also specifies additional features that are not disclosed by either the Smale patent, either alone or in combination with the Cheng patent (USPN 6,421,656).

*Examiner's response:*

a)      Examiner strongly disagrees with applicant's assertion that Smale fails to disclose the claimed limitations recited in claim 9. Smale clearly shows each and every limitation in claim 9. The Examiner would like to point out that the interpretation for the "filter structure" has changed. Smale teaches combine the multiple different files into a single exposable list; and expose the single exposable list to a filter structure comprising one or more attachment points configured to filter the list (column 3, lines 38-40; column 7, lines 24-43; and Figs. 4 and 5; the master list 50 adds connections for the multiple different files into a single exposable list, and exposes the single exposable list to the multiple data structures 52-54 that is configured to filter the list; that is, *multiple data structures 52-54 are interpreted as a filter structure comprising one or more attachment points*). In addition, see the rejection above in paragraph 11 for rejection to claims 9 and 11, and see the rejection above in paragraph 14 for rejection to claim 10.

*In the remarks, the applicant argues that:*

b)      **Claim 12** reads as follows: ...

As previously described with respect to claim 1, it is Applicant's position that the Smale

reference does not teach or suggest "attachment points," as that term is used and defined in the

present application. As such, even if one were to assume arguendo that it would be proper to

combine the teachings concerning XML in the Cheng patent (6,421.656) with the Smale

reference, the resulting combination would still not anticipate or render obvious the "architecture

comprising multiple different attachment points each of which is configured to" carry out the

steps of claim 12.

For at least these reasons, it is Applicant's position that the combination of the Smale patent

and the Cheng patent fails to teach or suggest each of the limitations of claim 12. As such, it is

believed that claim 12 is allowable over the combination of the Smale patent and the Cheng

patent, and such allowance is respectfully requested.

**Claims 13-17** each depend in some form from claim 12. As such, each of claims 13-17 is

necessarily allowable over the combination of the Smale patent and the Cheng patent by virtue

of" this dependency. Each of claims 13-17 also specifies additional features that are not disclosed

by the Smale patent in combination with the Cheng patent.


*Examiner's response:*

b)      Examiner strongly disagrees with applicant's assertion that the combination of Smale and

Cheng fails to disclose the claimed limitations recited in claim 12.  The combination of Smale

and Cheng clearly shows each and every limitation in claim 12.  The Examiner has already

addressed the applicant's arguments regarding claim 1, see paragraph 16, Examiner Response

(a).  In addition, see the rejection above in paragraph 14 for rejection to claims 12-17.

*In the remarks, the applicant argues that:*

c)   **Claim 26** reads as follows: ...

As noted above with respect to claim 1, it is Applicant's position that Smale does not teach

or suggest an "extension manager," as that term is used and defined in the present application. As

discussed above with respect to claim 1, the Office equates the multiple data structures 52-54 of

the Smale patent with the extension managers of the present invention. For the reasons set forth

previously with respect to claim 1, it is Applicant's position that the multiple data structures

52-54 of the Smale patent are not equivalent to the multiple extension managers of the present

invention is incorrect. Furthermore, Cheng describes nothing that would add to the Smale

reference to render obvious the "extension manager" recited in claim 26. Since the Smale and/or

Cheng patents do not teach or suggest an extension manager, it is axiomatic that neither the

Smale and/or Cheng patents teach or suggest the step of "notifying an extension manager," as

recited in claim 26.

For at least these reasons, it is Applicant's position that the combination of the Smale patent

and the Cheng patent fails to teach or suggest each of the limitations of claim 26. As such, it is

believed that claim 26 is allowable over the combination of the Smale patent and the Cheng

patent, and such allowance is respectfully requested.

**Claims 27-32** each depend in some form from claim 26. As such, each of claims 27-32 is

necessarily allowable over the combination of the Smale patent and the Cheng patent by virtue of

this dependency. Each of claims 27-32 also specifies additional features that are not disclosed by

the Smale and/or Cheng patent patents.

*Examiner's response:*

c)      Examiner strongly disagrees with applicant's assertion that the combination of Smale and

Cheng fails to disclose the claimed limitations recited in claim 26.  The combination of Smale

and Cheng clearly shows each and every limitation in claim 26.  The Examiner has already

addressed the applicant's arguments regarding claim 1, see paragraph 16, Examiner Response

(a).  Furthermore, the combination of Smale and Cheng teaches notifying an extension manager

that *is associated with at least one feature type* (Smale, abstract; column 3, lines 1-15; and

column 7, lines 16-27; *notification manager 32* is interpreted as the *extension manager*, which *is*

*associated with the multiple attachment points and with respective feature types*).  In addition,

see the rejection above in paragraph 14 for rejection to claims 26-32.


*In the remarks, the applicant argues that:*

d)      **Claim 33** reads as follows: ...

        Claim 33 has been amended to specify that the XML data is processed to using one or

more attachment points to identify XML nodes.

        As previously described with respect to claim 1, it is Applicant's position that the Smale

reference does not teach or suggest "attachment points," as that term is used and defined in the

present application. As such, even if one were to assume arguendo that it would be proper to

combine the teachings concerning XML in the Cheng patent (6,421.656) with the Smale

reference, the resulting combination would still not anticipate or render obvious the step of

"processing the XML data using one or more attachment points to identify XML nodes," as recited in claim 33.

For at least these reasons, it is Applicant's position that the combination of the Smale patent and the Cheng patent fails to teach or suggest each of the limitations of claim 33. As such, it is believed that claim 33 is allowable over the combination of the Smale patent and the Cheng patent, and such allowance is respectfully requested.

**Claims 34-39** each depend inn some form from claim 33. As such, each of claims 34-39 is necessarily allowable over the combination of the Smale patent and the Cheng patent by virtue of this dependency. Each of claims 34-39 also specifies additional features that are not disclosed by the Smale and/or Cheng patent patents.

*Examiner's response:*

d)      Examiner strongly disagrees with applicant's assertion that the combination of Smale and Cheng fails to disclose the claimed limitations recited in claim 33. The combination of Smale and Cheng clearly shows each and every limitation in claim 33. The Examiner has already addressed the applicant's arguments regarding claim 1, see paragraph 16, Examiner Response (a). In addition, see the rejection above in paragraph 14 for rejection to claims 33-39.

## *Conclusion*

18.      The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
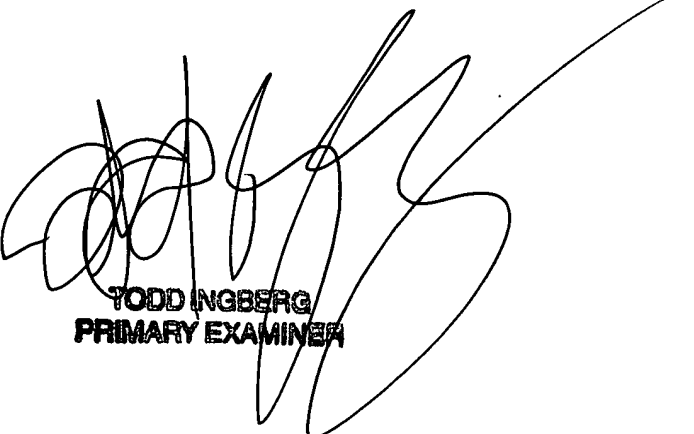
19.    Any inquiry concerning this communication from the examiner should be directed to

Qamrun Nahar whose telephone number is (703) 305-7699.  The examiner can normally be

reached on Mondays through Thursdays from 9:00 AM to 6:30 PM.  The examiner can also be

reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kakali Chaki, can be reached on (703) 305-9662.  The fax phone number for the

organization where this application or processing is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

QN
January 24, 2004

TODD INGBERG
PRIMARY EXAMINER